



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/549,448

06/27/2006

Rodolfo Noto

07040.0235

5514

22852

7590

01/14/2010

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/14/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,448	Applicant(s) NOTO ET AL.	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29,31-38,40-42,44-55,57 and 58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29,31-38,40-42,44-55,57 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1791

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 33, 42, 44-55, 57 and 58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 33 still defines that all the elongated elements (either the “fraction” or the “remainder”) are turned up around one of the bead cores. The original disclosure (esp. page 21, lines 15-33 and fig. 12) however only discloses turning up the elongated elements around both the first and second bead cores in the context of an embodiment in which *all* the elongated elements are turned about one or the other bead core, and thus not an embodiment in which only a “fraction”, now explicitly defined as “less than all”, of the elongated elements, is turned up as required by claim 29. This is therefore subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is new matter. In other words, since claim 29 defines that a fraction is turned up around the at least one bead core and this fraction is explicitly “less than all of the elongated elements”, then descriptive support is lacking for a tire that also meets claim 33 where all the elongated elements are turned up around the bead cores. Put differently, dependent claim 33 is read to be directed to the fig. 12 embodiment whereas this embodiment is not read to

Art Unit: 1791

be covered by or consistent with the current claim 29 (i.e. the fig. 12 embodiment does not have only a fractions turned up around the at least one bead core). To the extent that current claim 29 is to be read as consistent with the fig. 12 embodiment, an ambiguity in the scope of these claims is raised - see the 35 USC 112, second paragraph rejection below. An analogous lack of description/new matter issue is present in claim 47 as dependent on claim 42 as amended, it being stressed that claim 42 as amended defines that the fraction of the ends are located at a more radially internal position whereas claim 47 (as well as the description of fig. 12) would require that *all* of the ends to be turned up (and thus not just a fraction) have their ends at the more radially internal position.

In response to this rejection, applicant quotes a portion of the previous office action but this quote is incorrect as it omitted an essential line necessary to understand the examiner's position. In particular, applicant argues that

"the Office Action alleges that "the original disclosure only discloses turning up the elongated elements around both the first and second bead cores in the context of an embodiment in which only a 'fraction' is turned up as required by claim 29."

This incorrect quote confuses the examiner position which was (and essentially still is) that the original disclosure "only discloses turning up the elongated elements around both the first and second bead cores in the context of an embodiment in which all the elongated elements are turned about one or the other bead core, and thus not an embodiment in which only a "fraction" is turned up as required by claim 29."

At 4-6 lines from the end of claim 42, the amended language defines that “the turned up ends of the fraction” comprise ends at the radially more internal position. However, as originally described, it is not the turned up ends that are at a radially more internal position but rather the fraction of the ends actually before they are turned up (e.g. as illustrated in fig. 1b). This is therefore subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is new matter (and creates an ambiguity to be described in the subsequent rejection below).

3. Claims 29, 31-38, 40-42, 44-55, 57 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of the reference to a “fraction” of the elongated elements is still indefinite. In particular, at four lines from the end of claim 29, it is defined that “a fraction” of the elongated elements is turned up around the at least one bead core, this being read to require that only a fraction is turned up (i.e. not all elongated elements are turned up). As noted above, however, dependent claim 33 defines that all (i.e. the “fraction” and the “remainder”) of the elongated elements are turned up (apparently in reference to the fig. 12 embodiment). As this is a dependent claim and thus read to require all the requirements of claim 29, the presence of claim 33 renders the scope of what is meant by the “fraction” in claim 29 indefinite and confusing. In other words, to the extent that current claim 29 is to be read as consistent with the fig. 12 embodiment

Art Unit: 1791

(i.e. claim 33), an ambiguity is present in assessing the meaning of defining that “a fraction” is turned up - the scope of the claims therefore being entirely indefinite and confusing in this regard. Although defining that a “fraction” is turned up would normally be read as excluding the other fractions also being turned up, if this reference to a “fraction” does not exclude other (or all) elongated elements being turned up, then again this claim would read on any tire in which all the elements are turned up, as of course typical for many/most tires. Further, and along similar lines and as noted in the last office action, it is still not clear if this “fraction” is in reference to the elongated elements that make up a single ply/layer or could be read as relative to all the elements that make up all the plies in tire (in which case, a tire with one carcass layer ending at the bead and another layer being turned up, would read on this). As it seems from a complete reading of applicant’s disclosure that the intent is that only a fraction is turned up, this being a fraction within a single ply/layer, the claims have been so read for purposes of the prior art rejections but clarification is required to avoid an ambiguity on this key feature of the claims. Analogous ambiguities are also still present in claim 42 to the extent that it is to be read as consistent with claim 47 (which requires that all of the elongated elements (the “fraction” and the “remainder”) are turned up).

At 4 lines from the end of claim 29, no antecedent has been established for “the at least one bead core”, it being noted that the previous reference to “at least one bead core” was deleted.

At 4-6 lines from the end of claim 42, as noted above, the amended language defines that “the turned up ends of the fraction” comprise ends at the radially more

Art Unit: 1791

internal position. However, it is not clear how "turned up ends" could be at a more internal position than the bead core since they are turned up around the bead core (and thus would necessarily not end inward of the bead core). The intent would seem to be to define the fraction of the elongated elements that will be turned up (e.g. as illustrated in fig. 1b) but clarification is required.

4. Claims 29, 31, 32, 34-36, 38, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094584 to Auxerre taken in view of Caretta (US 6,457,504).

WO '584 to Auxerre (it again being noted that equivalent US 2004/0154720 is used effectively as a translation of this document, further references to the disclosure of Auxerre being to this publication) and Caretta '504 are applied for substantially the same reasons as set forth in the last office action. As to the amendments to claim 29, forming the carcass with strip elements is suggested/obvious from the Auxerre disclosure (it being additionally noted again that it is also still not even clear that claim 29 even requires that the fraction of the elongated elements is within a single ply, in which case even the essentially two ply configuration of fig. 2 could read on the claims, the term "strip-like elements" reading on either each ply or the plural cords within each ply).

As to the amendments to claim 29 to define the presence of first and second bead cores, note again bead cores 80 and 31 (fig. 2), it being stressed that bead core 80 is axially internal to the part "11" of the carcass (as well as the turnup part of "10") as well as axially external to the main part of carcass "10". Likewise, bead core "31" is

Art Unit: 1791

axially external to part "10" and also includes a bead core axially external to part "11".

Bead core "31" can also be defined as axially internal to the carcass ply in view of the bead core part located internal to the carcass part "11". Further, again only a fraction of the carcass is turned around a bead core (which can be termed either the first or second bead core as noted above and as required by claims 31-32/45-46) as clearly illustrated in fig. 2. A tire as required by claim 29 would therefore have been obvious.

As to the dependent claims, note the previous office action as well as the following discussion. As to claim 31-32 (and 45-46 to be treated with additional secondary references below), note again above that either bead core can be designated as the first or second given the present broad requirements of the claims. As to claim 34, the particular bead dimensions would have been readily and routinely selected by the artisan based on the type and size of tire contemplated - only the expected and predictable results following any given selection.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094584 to Auxerre taken in view of Caretta (US 6,457,504) as applied above, and further in view of JP 07-195915 as applied in the last office action.

6. Claims 42, 44, 45, 46, 49-53, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094584 to Auxerre in view of Caretta (US 6,457,504) as applied above, and further in view of at least one of [Dickinson (US 1,728,957 - newly cited), Bohm et al. (US 5,705,007 - newly cited) and EP 557,615 to Bohm (newly cited)].

As to claim 42, Auxerre and Caretta are applied for the same reasons described in the last office action and above, the new requirements for strip-like elements and first and second bead cores being addressed for the same reasons described above with respect to analogous requirements added to claim 29. As to the requirement in claim 42 for the strip elements being submitted to “necking down”, in view of Dickinson (esp. figs. 17-18), Bohm et al. ‘007 (e.g. fig. 1; col. 3, lines 30-40) and EP ‘615 to Bohm (e.g. figures), it is well known and obvious in this art to neck down local areas of a strip that is to be used to build a carcass on a toroidal support - only the expected and predictable results, including the ability for adjacent strips to align with one another along their length, would have been achieved. A method as claimed would therefore have been obvious. As to the dependent claims, note the previous office action as well as the above discussion with respect to analogous dependent tire claims. As to claim 57, it is well known and typical in this art to form tire beads by winding a metal wire in radially and axially adjacent coils, it being thus obvious to form for example bead core “80” in this manner. Note also that bead core 31 is wound in radially superposed coils and includes axially adjacent coils as well.

7. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094584 to Auxerre in view of Caretta (US 6,457,504) taken in view of at least one of [Dickinson (US 1,728,957 - newly cited), Bohm et al. (US 5,705,007 - newly cited) and EP 557,615 to Bohm (newly cited) as applied above, and further in view of JP 07-195915 as applied in the last office action.

Art Unit: 1791

8. Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094584 to Auxerre in view of Caretta (US 6,457,504) and at least one of [Dickinson (US 1,728,957 - newly cited), Bohm et al. (US 5,705,007 - newly cited) and EP 557,615 to Bohm (newly cited)] as applied above, and further in view of Weissert et al. (US 2004/0154727) and Noto et al. (US 2005/0076988) as applied in the last office action.

9. Applicant's arguments filed 10/1/2009 have been fully considered but they are not persuasive at least as regards the remaining rejections.

The arguments with respect to any 35 USC 112 rejections that were maintained are treated within the statements of rejection above.

With respect to the prior art rejections, applicant's arguments stress the requirement added to the independent claims for a first and second bead core. While it would be agreed that these arguments as well as the additional amendments to the claims to define that the elongated elements comprise strip-like elements having terminal ends (and necking down in the method claim), are sufficient to overcome the rejections based on Weissert and WO '043 to Caretta, WO '584 to Auxerre is still applicable against the claims as amended for the reasons detailed in the statement of rejection, it being stressed that the requirements with respect to the bead cores being axially internal and axially external to the at least one carcass ply are sufficiently broad to not distinguish the reference teachings.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1791

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
January 13, 2010